



PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Shinya TANIGUCHI et al.

Group Art Unit: Unknown

Application No.: 10/057,945

Examiner: Unknown

Filed: January 29, 2002

Docket No.: 111828

For: DATA OUTPUT SYSTEM, OUTPUT CONTROL TERMINAL, PROGRAM TO BE
APPLIED TO OUTPUT CONTROL TERMINAL, AND DATA OUTPUT METHOD

PRELIMINARY AMENDMENT

Director of the U.S. Patent and Trademark Office
Washington, D. C. 20231

Sir:

Prior to initial examination, please amend the above-identified application as follows:

IN THE ABSTRACT:

Please replace the Abstract filed with the attached Abstract hereto.

IN THE SPECIFICATION:

Please replace the specification with the substitute specification attached hereto.

IN THE CLAIMS:

Please replace claims 1-20 as follows:

1. (Amended) A data output system for establishing a connection between an output terminal that outputs data and a position management terminal that generates mobile terminal position information for specifying the position of a mobile terminal on the basis of a communication state between the mobile terminal and a base station so that the data output system can communicate with the output terminal and the position management terminal, and

the data output system outputting data requested by a user of the mobile terminal using the output terminal,

the mobile terminal position information being obtained from the position management terminal, and

data output control of the output terminal being performed based on a positional relationship between the mobile terminal position specified by the obtained mobile terminal position information and an output terminal position specified by output terminal position information for specifying the position of the output terminal.

2. (Amended) A data output system for establishing a connection between an output terminal that outputs data and an output control terminal that performs data output control of the output terminal for communication with each other, for establishing a connection between the output control terminal and a position management terminal that generates mobile terminal position information for specifying the position of a mobile terminal on the basis of a communication state between the mobile terminal and a base station for communication with each other, and for outputting data requested by a user of the mobile terminal using the output terminal,

the output control terminal including:

a storage device that stores output terminal position information for specifying the position of the output terminal; and

a position information obtaining device that obtains the mobile terminal position information from the position management terminal; and

the data output control of the output terminal being performed based on a positional relationship between the mobile terminal position specified by the mobile terminal position information obtained by the position information obtaining device and the output terminal position specified by the output terminal position information in the storage device.

3. (Amended) A data output system according to Claim 2, the output control terminal transmitting a data output request to the output terminal when the mobile terminal position is within a predetermined range based on the output terminal position.

4. (Amended) A data output system according to Claim 2, the output control terminal transmitting a data output request to the output terminal when the mobile terminal position is within a predetermined range based on the output terminal position and when a predetermined period of time has passed since the mobile terminal position became within the predetermined range.

5. (Amended) A data output system according to Claim 2, the data output system establishing a connection between the output control terminal and the mobile terminal for communication with each other,

the output control terminal including a control command storage device that stores a specific control command for controlling a specific function of the output terminal, when the mobile terminal position is within a predetermined range based on the output terminal position, the output control terminal transmits a list from which the specific control command is selectable to the mobile terminal, and

when the output control terminal receives the selection of the specific control command, the output control terminal transmits the specific control command in the control command storage device to the output terminal.

6. (Amended) A data output system according to Claim 5, the output control terminal transmitting the list from which the specific control command is selectable to the mobile terminal when a distance between the output terminal position and the mobile terminal position is less than or equal to a predetermined value.

7. (Amended) A data output system according to Claim 5, wherein, when the output control terminal receives a registration request for registering the output terminal from

the mobile terminal, the output control terminal transmits a transmission request for transmitting a control command list to the output terminal corresponding to the registration request,

when the output control terminal receives the control command list in response to the transmission of the transmission request, the output control terminal registers the mobile terminal position information obtained by the position information obtaining device as the output terminal position information in the storage device, and registers the received control command list in the control command storage device so that the control command list corresponds to the output terminal position information, and

when the output terminal receives the transmission request for transmitting the control command list, the output terminal transmits the control command list, including the specific control command, to the output control terminal.

8. (Amended) A data output system according to claim 5, the output control terminal transmitting a response request to the output terminal,

when the output control terminal receives no response in response to the output request, the output control terminal reads from the storage device the output terminal position information for the output terminal which transmits no response,

based on the mobile terminal position information obtained by the position information obtaining device, the output control terminal searches for the mobile terminal which is within a predetermined range based on the output terminal position specified by the read output terminal position information,

the output control terminal transmits to the detected mobile terminal a presence confirmation request for confirming the presence of the output terminal which transmits no response, and

when the output control terminal receives no presence confirmation in response to the presence confirmation request, the output control terminal clears the registration of the output terminal which transmits no response.

9. (Amended) A data output system according to claim 2, the output terminal being a printer.

10. (Amended) A data output system according to claim 2, the output terminal being a projector.

11. (Amended) An output control terminal for establishing a connection between a position management terminal and an output terminal in a data output system as set forth in Claim 2 for communication with the position management terminal and the output terminal, comprising:

a storage device that stores output terminal position information for specifying the position of the output terminal; and

a position information obtaining device that obtains mobile terminal position information from the position management terminal;

data output control of the output terminal being performed on the basis of the positional relationship between the mobile terminal position specified by the mobile terminal position information obtained by the position information obtaining device and the output terminal position specified by the output terminal position information in the storage device.

12. (Amended) A program to be applied to output control terminal as recited in Claim 11, the program making a computer execute processing in which data output control is performed based on the positional relationship between the mobile terminal position specified by the mobile terminal position information obtained by the position information obtaining device and the output terminal position specified by the output terminal position information in the storage device.

13. (Amended) A data output method, comprising:

establishing a connection between an output terminal that outputs data and a position management terminal that generates mobile terminal position information for specifying the position of a mobile terminal based on a communication state between the mobile terminal and a base station so that the data output system can communicate with the output terminal and the position management terminal, and

outputting data requested by a user of the mobile terminal using the output terminal,

the mobile terminal position information being obtained from the position management terminal, and

data output control of the output terminal being performed based on a positional relationship between the mobile terminal position specified by the obtained mobile terminal position information and an output terminal position specified by output terminal position information for specifying the position of the output terminal.

14. (Amended) A data output method, comprising:

establishing a connection between an output terminal that outputs data and an output control terminal that performs data output control of the output terminal for communication with each other, for establishing a connection between the output control terminal and a position management terminal for generating mobile terminal position information for specifying the position of a mobile terminal on the basis of a communication state between the mobile terminal and a base station so that they can communicate with each other, and

outputting data requested by a user of the mobile terminal using the output terminal,

the output control terminal including the step of:

storing output terminal position information for specifying the position of the output terminal; and

obtaining the mobile terminal position information from the position management terminal; and

the data output control of the output terminal being performed based on the positional relationship between the mobile terminal position specified by the obtained mobile terminal position information and the output terminal position specified by the stored output terminal position information.

15. (Amended) A data output method according to Claim 14, the output control terminal transmitting a data output request to the output terminal when the mobile terminal position is within a predetermined range based on the output terminal position.

16. (Amended) A data output system according to Claim 14, the output control terminal transmitting a data output request to the output terminal when the mobile terminal position is within a predetermined range based on the output terminal position and when a predetermined period of time has passed since the mobile terminal position became within the predetermined range.

17. (Amended) A data output method according to claim 14, the data output method establishing a connection between the output control terminal and the mobile terminal for communication with each other,

the output control terminal stores a specific control command for controlling a specific function of the output terminal, and

when the mobile terminal position is within a predetermined range based on the output terminal position, the output control terminal transmits a list from which the specific control command is selectable to the mobile terminal, and

when the output control terminal receives the selection of the specific control command, the output control terminal transmits the stored specific control command to the output terminal.

18. (Amended) A data output method according to Claim 17, the output control terminal transmitting the list from which the specific control command is selectable to the mobile terminal when a distance between the output terminal position and the mobile terminal position is less than or equal to a predetermined value.

19. (Amended) A data output method according to claim 17, wherein, when the output control terminal receives a registration request for registering the output terminal from the mobile terminal, the output control terminal transmits a transmission request for transmitting a control command list to the output terminal corresponding to the registration request,

when the output control terminal receives the control command list in response to the transmission of the transmission request, the output control terminal registers the obtained mobile terminal position information as the output terminal position information, and registers the received control command list so that the control command list corresponds to the output terminal position information, and

when the output terminal receives the transmission request for transmitting the control command list, the output terminal transmits the control command list including the specific control command to the output control terminal.

20. (Amended) A data output method according to claim 17, the output control terminal transmitting a response request to the output terminal,

when the output control terminal receives no response in response to the output request, the output control terminal reads the stored output terminal position information for the output terminal which transmits no response,

based on the obtained mobile terminal position information, the output control terminal searches for the mobile terminal which is within a predetermined range based on the output terminal position specified by the read output terminal position information,

the output control terminal transmits to the detected mobile terminal a presence confirmation request for confirming the presence of the output terminal which transmits no response, and

when the output control terminal receives no presence confirmation in response to the presence confirmation request, the output control terminal clears the registration of the output terminal which transmits no response.


REMARKS

Claims 1-20 are pending in this application. By this Preliminary Amendment, the abstract, specification and claims 1-20 are amended. No new matter is added.

The attached Appendix includes a marked-up copy of the substitute specification (37 C.F.R. §1.125(b)(2)) and claim (37 C.F.R. §1.121(c)(1)(ii)).

Should the Examiner believe that anything further would be desirable in order to place this application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,



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JAO:JSK/kap

Attachment:

Appendix
Substitute Abstract
Substitute Specification along with marked-up
copy showing the changes made thereto

Date: April 25, 2002

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